

North Carolina Department of Environment and Natural Resources

Dexter R. Matthews, Director

Division of Waste Management

Michael F. Easley, Governor William G. Ross Jr., Secretary

June 15, 2004

Mr. Allen Stowe Duke Power EC11E / 526 South Church Street Charlotte, NC 28202-1802 SCANNED 9 3/A0/14

Re:

General Conditions and Site Specific Design Requirements for the Proposed Marshall Steam Station Flue Gas Desulfurization Residue Landfill Catawba County, North Carolina, Permit Number 18-XX

Dear Mr. Stowe:

The Solid Waste Section (Section) of the Division of Waste Management has completed its review of the site study application Marshall Steam Station Flue Gas Desulfurization (FGD) Residue Landfill. The proposed site is located in Catawba County, on Highway NC 150 just west of Lake Norman in Terrell, North Carolina. The site will be accessed via Steam Plant Road (SR 1847) according to the site and construction plans in the site suitability application. Pursuant to Rule .0503(1) and .0504(1), of the North Carolina Administrative Code 15A NCAC 13B, the Division is notifying Duke Energy that the site is considered suitable based on the information provide to the Section in documents prepared by or for Duke Power. The site suitability documents are as follows:

- 1. Duke Power Marshall Steam Station Catawba County, N.C. Flue Gas Desulfurization (FGD) Residue Landfill Permit Application Site Suitability Information 15A NCAC 13B .0503(1) and .0504(1) Requirements and Responses Volume 1; application dated August 29, 2003 and received September 3, 2003 from Duke Power;
- Duke Power Marshall Steam Station Catawba County, N.C. Flue Gas Desulfurization (FGD) Residue Landfill Permit Application Site Suitability Information Volume 2 Hydrogeologic Study S&ME Project No. 1264-02-578; application dated August 29, 2003 and received September 3, 2003 from/Duke Power;
- 3. Response to Comments FGD Scrubber Landfill Duke Power-Marshall Steam Station Terrell, Catawba County, North Carolina S&ME Project 1264-02-578 dated May 20, 2004 from Al Quarles of S&ME to William Miller of Duke Power and received June 1, 2004 by the Section.
- 4. Letter dated 20 August 2003 from Jacky Eubanks, Catawba County Planning Department, addressing the zoning of the parcel of land that the proposed gypsum landfill will be located. This letter also addresses the limitations of the site in disposing of gypsum material generated at the Marshall plant site only.

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Duke Power is authorized to prepare an application for a permit to construct. This letter addresses the approved disposal area, a scope for any additional subsurface investigations if required to prepare the construction plans for the disposal area and support facilities and design and construction standards for the referenced facility.

Section .0201 of the Solid Waste Management Rules (15A NCAC 13B) requires the Division to issue a solid waste permit in two parts. The first part is a Permit to Operate. The Division may only issue a Permit to Operate after it determines that the facility has been constructed in accordance with the construction permit and that all preoperative conditions have been met. This letter is not a permit. This letter only informs the applicant that they may proceed with their construction permit application. The final action the Division may take on a permit application is the issuance or denial of a permit.

APPROVED DISPOSAL AREA

General

Based upon information submitted in the August 2003 site suitability application and additional information received, as mentioned above, the Solid Waste Section has determined that the ±20.64 acre footprint, (contained within the Duke Power property), as shown on the *Proposed FGD Residue LandFill Site* (Figure No. 5), is suitable for the development of the Industrial landfill.

The footprint may be smaller based on site specific design and hydrogeologic design of the site monitoring system, based on information in the Construction Plan submitted and any other activities the Duke Power undertakes at the site to include recycling, composting and the location of buildings/storage facilities.

GENERAL CONDITIONS AND SITE-SPECIFIC DESIGN REQUIREMENTS

The Section requires the submittal of a construction plan application for the first five-year development phase, as identified in the conceptual design plan, which is consistent with the requirements of 15A NCAC 13B .0201(e), including, but not limited to, the site specific criteria set forth in this letter.

Buffers

Horizontal buffers shall be as described in the conceptual design and as designated in Rule .0503(2)(f), and shall also include the following buffer criteria:

- a) A 100-foot minimum buffer shall be maintained between facility boundaries and borrow areas, unless otherwise approved by the Division;
- b) A minimum 50-foot buffer shall be maintained between borrow areas and delineated wetlands;

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- c) A minimum 50-foot buffer shall be maintained between disposal areas and delineated wetlands;
- d) A minimum 50-foot buffer shall be maintained between facility activities and any sites of archeological, historical and/or cultural significance;
- e). A minimum 200-foot buffer shall be maintained between the disposal area and the site property lines;
- f). A minimum 500-foot buffer to wells(on-site or off-site) and off-site dwellings.

Duke Power may utilize all remaining areas of the site, except buffer areas, for other solid waste management activities (such as yard waste composting or recycling) or for landfill support activities (such as stockpiling of cover material) upon approval by the Section.

Design and Construction Standards

- 1. The applicant must complete the application for a permit to construct consistent with Rule .0503(2) and .0504(2) and the general site conditions and design requirements of this letter.
- 2. A property survey (describing the metes and bounds of the entire property owned) sealed by a licensed North Carolina Surveyor, shall be submitted with the permit to construct application.

Additional Subsurface Investigation

Any necessary additional geologic and hydrogeologic information; along with ground water monitoring plan information shall be submitted as a component of the construction plan application. The report shall present the results of any additional subsurface investigations at the site and shall be consistent with the requirements of the Solid Waste Management Rules.

The Permit to Construct and the Permit to Operate will be issued to Duke Power, as owner of the property.

The Division encourages Duke Power to take an aggressive approach to comprehensive solid waste management in order to contribute towards the States' waste reduction goals and lessen dependency upon conventional disposal in a solid waste landfill facility.

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If you have any questions, or would like to schedule a meeting to discuss this letter, please contact our office at (919) 733-0692, Ext. 255. The staff engineer assigned this project is Jim Barber at (919) 733-0692 Ext. 255.

Sincerely,

James C. Coffey

Section Chief

Solid Waste Section

Division of Waste Management

cc:

Brent Rockett - SWS

Jim Barber - SWS

Teresa Bradford - SWS

Ellen Lorscheider - SWS

Raleigh Central File: Catawba County 18-04 (permit file)